New Elmendorf Radiology

Background

The Medical Diagnostic Imaging System was declared operational in the old 3rd Medical Group Hospital, Elmendorf AFB, Alaska on 26 August 1997. The decision was made to install the system in the old facility for two main reasons. The staff would be fully trained by the time they move to the new facility, and a patient image database would be built early, eliminating the need to digitize what would otherwise be historical images.

Only plain film operation was converted to CR. The other modalities were brought on line when the system was moved to the new facility in 1998/1999. Ft Richardson, a spoke to Elmendorf is not operational due to the fact that the T-1 line is not yet installed.

An additional feature that is installed at Elmendorf is "Access - Take Home Radiology", an application that makes images available to clients at home via the telephone network. This is especially useful for radiologists who are on call during bad weather conditions.

Images are also "pushed" to a networked server so that physicians can display images on their desktop PC's using a free Netscape plug-in. Unfortunately, the PC's and the LAN in the old hospital were not robust enough to facilitate this feature. The new hospital LAN supports this method of image distribution.

The installation at Elmendorf is unique in that the hospital in part of a consortium called the Alaska Federal Health Care Partnership (AFHCP) consisting of DOD, Coast Guard, Indian Health Service and the Veterans Administration. There is considerable sharing of resources. The VA hospital for example has installed CR at its hospital but archives all the images on the Elmendorf system. The FY 99 plan included the installation of digitizers at two Coast Guard clinics in Kodiak and Ketchikan. Their images will are read and archived at Elmendorf.

Installation of PACS in the new hospital began in November 1998. New equipment was installed in the new hospital while the current suite supported the old facility. A fiber link between the two hospitals enabled the transition to the new hospital computer room with the minimum of downtime. Acceptance testing in the new facility was completed in June 1999.

Organization

COL Roger U. Bisson, - Commander, 3rd Medical Group
LtCol Dave Vanderburgh - Functional Project Officer, Department of Radiology
Jim Francoise – Project Manager, Project Akamai / Pacific Regional Program
    Office

Mission Statement

Install a Picture Archiving and Communications System (PACS) in the Old 3rd Medical Group hospital and re-locate the system to the new Elmendorf Hospital for all radiology modalities except digital mammography.

Goals and Objectives

Objectives - Install PACS in the New Elmendorf Hospital.
- Establish Elmendorf as one of the hubs in the Alaska Virtual Radiology Environment.
- Move operations from the old to the new hospital.
- Establish Ft Richardson as a remote Teleradiology site.
- Establish Kodiak and Ketchikan Coast Guard Clinics as Teleradiology sites.
- Connect the VA for archiving in the New Hospital.

Goals: - Identify equipment that will move from the old to the new facility.
- Plan the transition to the new facility.
- Install MDIS core system in the new facility.
- Update the new facility system with the historical database.
- Transition PACS operation to the new facility with zero downtime.
- Conduct Acceptance Testing in January - February 1999.
- Begin clinical operations by January 1999.

Current Status

a) Primary Accomplishments -
1. System is Operational in the new facility.
2. Acceptance testing completed in February – March 1999.

b) Project Timelines-
1. Complete systems design by 30 January 1998.
2. Submit DO by July 1998.
3. Complete Installation / transition plans by March 1998.
4. Conduct vendors meeting at Elmendorf in May 1998.
5. Begin installation by BOD, 26 Oct 1998.
6. Conduct systems training during November - December 1998.
7. Conduct IOC by December 1998.
8. Conduct AT by December 1998.
9. Switch the database over to new facility November 1998.
10. Complete AT by March 1999.
11. Declare system operational by March 1999.

Strategic Direction

Elmendorf AFB hospital is a large hub in the Alaska Federal Health Care Partnership (AFHCP). As such, it is central in the research effort to explore the networking of federal facilities in the AFHCP. Further networking can be accomplished by connecting with facilities in the lower 48 states, namely Madigan AMC and Tripler AMC. Central archiving or data warehousing is also an issue that will be studied because it is a central part of the eventual "virtual radiology" department. Elmendorf will also be a critical player in the implementation of Telemedicine in the Alaska region.

Budget/Financial Status and Information

        Funding Requirement: $2,955,568
        Spending Plan: See attached budget plan.
        Outyear Funding: The 3rd Medical Group is responsible for programming for
                outyear funds, including maintenance funds after the expiration of the
                one-year warranty period.

Business Associations

        Corporate Partnerships:
                GE Medical Systems Integrated Imaging Solutions Group
                Dejarnette, INC.
                Fuji Medical Systems U.S.A., INC.
                Imation (3M)
                MIS-LABS / Informatech, INC.
                MedWeb
        Government Partnerships
                Joint Information Technology Program Office (JITPO), FT Detrick
                AKAMAI Project Office

Project Security

        System Security- The system is doubly protected through usernames and
                passwords. The list of authorized users is maintained by the
                systems administrator.
        Standards compliance measures : Standards published or enforced by the
                Security Manager, Information Management Office are complied
                with.

Summary

Plain film CR was installed at the old Elmendorf hospital. The system was declared operational on 25 August 1997 and clinical use began on 26 August 1997.   BOD for the new hospital is in on 26 October 1998. Installation of the new PACS will begin in the new facility on that date. All modalities except digital mammography will be converted to CR. The system is expected to be operational by 1 February 1999.

As of: 09/01/99